IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Stephen Smith

Serial No.: 09/539,392

Filed: March 31, 2000

Group Art Unit: 2155

Examiner: Liang-che A. Wang

For: ONLINE SYSTEM AND METHOD OF LOCATING CONSUMER PRODUCT HAVING SPECIFIC CONFIGURATIONS IN THE ENTERPRISE PRODUCTION PIPELINE AND INVENTORY

Attorney Docket No.: FMC 1732 PUSP

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal brief from the final rejection of claims 1-3 and 5-44 of the Office Action dated May 14, 2004. This application was filed on March 31, 2000.

I. REAL PARTY IN INTEREST

The real party in interest is Ford Motor Company, a corporation organized and existing under the laws of the state of Delaware, and having a place of business at The American Road, Dearborn, Michigan 48121, as set forth in the assignment recorded in the U.S. Patent and Trademark Office on March 31, 2000 at Reel 010725, Frame 0943.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences known to appellant, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-3 and 5-44 are pending in this application. Claims 1-3 and 5-44 have been rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

An amendment after final rejection was not filed.

V. SUMMARY OF THE INVENTION

The present invention provides a method and system wherein a consumer is provided realtime information, prior to the placement of an order or purchase by the consumer, regarding the availability and status of a configured product in relation to the product's manufacturing and delivery process or "pipeline." Specifically, the invention provides an on-line method and system wherein the product delivery time to a consumer is reduced by locating and "tagging" an available product already in a product pipeline. A consumer is allowed to locate and tag the desired product at various stages of the pipeline, including but not limited to scheduled and unscheduled order banks, final assembly, in-plant inventory, in-transit stock, and dealer inventory. A located product may be tagged, for example, using a customer credit card, checking account number or electronic voucher or gift certificate. In variations of the invention, the consumer configures a product as required and places a product order when no acceptable matches are found in the product pipeline. Pre-existing or even canceled orders can be modified as required to fulfill the product order. In another variation of the invention, expected delivery dates are calculated and updated based upon the progress

of an ordered or tagged product through the product pipeline. The present invention also provides an on-line method and system wherein a consumer tracks the progress of an ordered product through the product pipeline. Real-time status can be provided as requested or automatically in accordance with the occurrence of a predefined or significant event. In some variations, consumer preferences and trends are reported.

In one embodiment of the present invention, an online system of locating consumer products having specific configurations in an enterprise production pipeline and inventory is provided. The system includes a locate client process operable to receive product configuration data and generate a search request message incorporating the product configuration data in response to user input, and an inventory database storing product availability data in the enterprise production pipeline and in inventory. A locate server process is operable to receive the search request message from the locate client process, and search the product availability data in the inventory database for products matching and substantially matching the product configuration data. The locate server is further operable to generate a search reply message containing the matching products, and return the search reply message to the locate client process.

In another embodiment of the present invention, an online method of locating consumer products having specific configurations in an enterprise production pipeline and inventory is provided. The method includes receiving a search request message having product configuration data submitted by a user, formulating search query with search criteria corresponding to the product configuration data, and searching an inventory database for a product matching the product configuration data. The inventory database contains products on the order bank, in-production, in-transit, and in-inventory. The method then generates a search reply message containing any product substantially matching the product configuration data, and sends the search reply message to the user.

In yet another embodiment of the present invention, an online method of locating automotive vehicles having specific configurations in an enterprise production pipeline and inventory for purchase is provided. The method includes receiving a search request message having vehicle configuration data submitted by a user, formulating a search query with search criteria corresponding to the vehicle configuration data, and searching an inventory database for a vehicle matching the vehicle configuration data. The inventory database contains vehicles on the order bank, in-production, intransit, and in-inventory at the dealerships. Then a search reply message containing any vehicle substantially matching the vehicle configuration data is generated. The search reply message includes a vehicle identifier and vehicle configuration data of each substantially matching vehicle. The search reply message is then sent to the user.

In another embodiment of the present invention, an online method of purchasing a vehicle includes displaying vehicle configuration data, receiving user online input on vehicle configuration, including make, model, and color of the vehicle, and receiving user online input to search for a vehicle having the vehicle configuration. The method further includes generating a search request message incorporating the user-entered vehicle configuration, and sending the search request message to a locate process. Thereafter, a search reply message including a list of vehicles substantially matching the user-entered vehicle configuration is received, and the list of vehicles is displayed to the user.

VI. ISSUES

1.   Are claims 1-3 and 5-44 patentable under 35 U.S.C. §103(b) when the cited references have been improperly combined and fail to teach essential limitations of independent claims 1, 10, and 24?

VII. ARGUMENT

1.   Rejection under 35 U.S.C. §103(b)

a.   Rejection of claims 1-3 and 5-44 under 35 U.S.C. §103(b) is inappropriate because the combination of Joseph and Gignac does not disclose certain limitations of independent claims 1, 10, 24.

Claims 1, 6-7, 10-11, and 17-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,878,401, issued to Joseph ("Joseph") in view of Gignac, "Descartes tracks inventory through cyberspace" ("Gignac"). Independent claim 24 will also be considered here since the Examiner has stated that claims 24-37 and 38-44 are rejected for the same reasons as claims 10-23.

Applicant respectfully traverses the Examiner's rejections for the reasons set-forth below. The combination of Joseph and Gignac does not teach the claimed invention as suggested by the Examiner. The Examiner states that Joseph "has taught an online system of locating consumer products having a specific configuration in an enterprise production pipeline and inventory comprising" a locate client process, an inventory database, a locate server process (Final Office Action, dated May 14, 2004). The Examiner concedes that Joseph does not teach "an inventory database that stores product availability data for products that are on the order bank, being produced, in-transit to distribution facilities, and products at the distribution facilities" (Office Action, dated November 10, 2003). The Examiner uses Gignac to provide this missing element in formulating his rejection under 35 U.S.C. § 103(a).

The combination of Joseph and Gignac may not be used to construct the present invention because neither reference discloses an inventory database (or equivalent step) in which product availability data for products that are on the order bank, being produced, in-transit to distribution facilities, and products at the distribution facilities" is searched.

"Gignac provides a system that "proactively monitors an **order**, identifies whether suppliers are shipping in time, and what the status of a customer's order is as it moves from the supplier to the distributor to the VAR to be configured for a customer." (Gignac, emphasis added.) Gignac (and therefore the combination with Joseph) does not disclose locating a product in such a database. In the present invention, independent claims 1 and 10 do not disclose a method in which an order is tracked as in Gignac. Instead the present invention discloses an online system and method which **locates a product** which a consumer may or may not order. Specifically, Gignac does not teach the utilization of an inventory database as required by independent claim 1. Similarly, Gignac does not teach the analogous database step of claim 10 in which "product availability data associated with products that are on the order bank, in-production, in-transit, and in-inventory for a product matching the product configuration data" is searched.

The combination of Joseph and Gignac does not suggest the present invention. Instead, if Joseph and Gignac are logically combined the resulting method or system would be a method or system for determining if "alternative items for items that are out of stock" were immediately available (Joseph, col. 1, 60-64.) which tracks an order once a consumer has ordered one of the alternatives. As set forth above, Gignac does not (and accordingly its combination with Joseph) suggest utilization of the comprehensive inventory database of independent claim 1.

In the Final Office Action, the Examiner rejects Applicant's argument regarding the lack of an inventory database in Gignac in summary fashion. The Examiner states:

> Gignac provides a tracking system to track order status. It is fundamental for a tracking system to comprise storage for the tracking orders, so the products (messages) are not lost. Note the title of the article sis (sic) "Descartes tracks inventory through cyberspace. Cyberspace by definitions is widely

interconnected storage. Therefore Gignac does teach the inventory as claimed.

Final Office Action, dated May 14, 2004.

The Examiner offers no support for his conclusory statements or definition of cyberspace. The term "inventory database" must be viewed in context of the entire invention. Moreover, the Examiner fails to appreciate that Gignac is merely a survey article and is not enabled with respect to how a monitoring system is implemented. The Federal Circuit has consistently held that prior art references must be enabling:

> That prior art patents may have described failed attempts or attempts that used different elements is not enough. **The prior art must be enabling**. See Motorola, Inc. v. Interdigital Tech. Corp., 121 F.3d 1461, 1471, 43 USPQ 2d 1481, 1489 (Fed. Cir. 1997) ("In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method." (quoting Beckman Instruments, Inc. v. LKB Produkter AB, 892 F.2d 1547, 1551, 13 USPQ 2d 1301, 1304 (Fed. Cir. 1989))).

Rockwell Int'l Corp. v. United States, 47 USPQ 2d 1027, 1032 (Fed. Cir. 1998)

Nowhere in Gignac is the utilization of a database mentioned. A multitude of possibilities not relying on a database exist by which the intended order monitoring functionality of Gignac is achieved. For example, the monitoring might be achieved by an emailing or other messaging system in which a request is sent to each location in the order processing chain for status information regarding the order. Moreover, it would be improper for the Examiner to state that it is inherent to Gignac that a database be used. Such a construction would be inapposite to current law regarding inherency. (See, for example, *Ex parte Schricker*, 56 USPQ 2d 1723, 1725 (B.P.A.I. 2000) (unpublished) which explains "Inherency and obviousness are somewhat like oil and water--they do not mix well.") The Examiner's assertion that Gignac provides such an inventory database is the purest form of hindsight because the Examiner could only

have manufactured the use of such a database in Gignac by referring to the present invention. In the more recent Final Office action, the Examiner rebuffs Applicant's argument by stating:

> In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Gignac provides a tracking system to track order status. Iris fundamental for a tracking system to comprise storage for the tracking orders, so the products (messages) are not lost. Note the rifle of the article sis "Descartes tracks inventory through cyberspace." Cyberspace by definition is widely interconnected storage. Therefore Gignac does teach the utilization of an inventory as claimed.

In this most recent Office Action, the Examiner doesn't even make a pretext to provide a motivation to combine the references, instead, the Examiner states "that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning." The Examiner neglects the fact that Applicant's invention has provided the blueprint to combine the references.

For the reasons set forth above, independent claims 1, 10 and 24 are allowable along with their dependent claims 2-3, 5-9, 11- 23, and 25-44.

b.   Joseph Teaches Away from the Proposed Modifications, and the Proposed Modifications would Render Joseph Unsatisfactory for its Intended Purpose

Applicant respectfully asserts that independent claims 1, 10, and 24 are allowable under 35 U.S.C. 103(b) because Joseph cannot be modified in the manner proposed

because Joseph would not tolerate this modification - Joseph teaches away from the proposed modification and the proposed modification would render Joseph unsatisfactory for its intended purpose. The M.P.E.P. very clearly requires that a "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. M.P.E.P. § 2141.02 citing W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1.540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Furthermore, the M.P.E.P. makes it clear that "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." M.P.E.P. § 2143.01.

At least one of Joseph's objectives is to provide a customer with an actual shoe on the customer's visit - either the shoe the customer desires if it is in stock or an acceptable in-stock alternative if the desired shoe is out of stock. Joseph's premise is that the desired shoe is out of stock, and it is aimed at providing a solution to that situation. Joseph states, "If displayed items are not in inventory, customer dissatisfaction and loss of sales may result." (Joseph, col. 1, ll. 19-20). Thus, according to Joseph, an item not being in inventory is a cause of customer dissatisfaction that leads to loss of sales. Joseph mentions prior art systems but concludes, "None of these, however, provides a method of and apparatus for enabling a store customer to view alternative styles similar to a selected style that is out of inventory so as to avoid customer dissatisfaction" which, according to Joseph, is caused by displayed shoes being out of inventory. (Joseph, col. 1, ll. 32-38).

Joseph also states that in a shoe store, for example, when a style is selected by a customer in a particular size, the selected pair of shoes is retrieved from a stockroom so that the customer may try the shoes on (Joseph, col. 1, ll. 41-44). According to Joseph, the productivity of the stockroom personnel is critical in maintaining customer satisfaction in that "if a customer must wait too long for the desired shoes to be retrieved, the customer may leave." (Joseph, col. 1, ll. 48-51). Moreover, if a desired shoe style is out of inventory, the

customer may return to the displays and select another style, which may itself be out of inventory. This may result in customer dissatisfaction. Thus, delay is another cause of customer dissatisfaction and thus loss of sales according to Joseph.

An apparent further objective of Joseph is to salvage a sale that would have otherwise been lost due to a desired item being out of stock. Based on this hypothetical objective, one might also argue that searching and placing a desired item on back order would further this objective of retaining a sale that would have been lost due to an item being out of stock. According to Joseph, however, this simply is not true; the solution of backordering the originally selected item would still not meet the hypothetical objective of Joseph. To illustrate this point, Applicant asks what would happen if Joseph were modified to backorder desired items that are currently out of stock at the retail sales facility? Backordering the desired item (which has been determined to be out of stock at the retail sales facility) would cause the customer to wait at least a number of days or weeks for the shoe to be delivered. Requiring a customer to wait this long would not salvage a sale when, according to Joseph, even taking too long retrieving shoes from the stockroom or requiring the customer to return to the sales floor, which is presumably only a few feet away, to select an alternative might forfeit the sale. Joseph makes it clear that putting desired items on backorder is an unacceptable delay that customers would not tolerate causing the store to lose a sale and frustrating the proposed objective of Joseph. Thus, even the proposed objective of Joseph is not furthered, according to Joseph, if Joseph is modified to search "an inventory database that stores product availability data for products that are on the order bank, being produced, in-transit to distribution facilities, and products at the distribution facilities" as recited in Claim 1 as amended.

Furthermore, according to Joseph, "[i]f the [desired] item is unavailable, means is provided for determining alternative items for the requested item and for determining whether the alternative items are available. The available alternative items are interactively displayed from the customer." (Joseph col. 1, l. 65 - col. 2, l. 3). Only the available alternative

items are displayed because, according to Joseph, those are the only items that will prevent loss of the sale. As Applicants have reiterated time and again, Joseph clearly would not tolerate modifications that would introduce further delays into the system. Joseph wants to provide the customer with a shoe on that visit to the store, and, according to Joseph, if that goal is not accomplished, the store will lose the sale.

As another example of the impropriety of the Examiner's proposed modifications to Joseph, in responding to Applicant's argument that combining Gignac with Joseph (under the Examiner's proposed interpretation of Gignac) would render Joseph inoperable for its intended purpose, the Examiner has stated – "Gignac is the teaching reference that enhances the system of Joseph, so Joseph would have improved his invention by having the ability to track the sneakers when it is not in stock." (Advisory Action, Continuation Sheet, dated August 1, 2003). However, it does not matter that the Examiner thinks Gignac would improve Joseph. What matters is Joseph's recited intended purpose. For these reasons, Joseph cannot be modified in the proposed manner, and there would have been no suggestion to modify Joseph to search in the proposed manner at the time of invention.

c.   Gignac Falls to Teach the Acknowledged Deficiencies of Joseph

Applicant submits that Gignac fails to teach, suggest, or disclose the following limitations of claim 1 --an inventory database that stores product availability data for products that are on the order bank, being produced, in-transit to distribution facilities, and products at the distribution facilities. Gignac merely teaches monitoring a particular product order as it moves through a distribution channel. Tiffs cannot be equated with monitoring product inventory. Gignac is limited to monitoring the status of a particular "customer's order." (Gignac, page 1). Presumably, one can monitor where in the supply chain a particular order exists. Significantly, however, the system described in Gignac is limited to monitoring only preexisting orders. There is no teaching within Gignac that such monitoring capabilities extend

beyond the scope of a particular pre-existing order, and certainly no teaching that such monitoring is available on an entire product inventory. In this regard, the proposed Joseph-Gignac combination fails to teach, suggest, or disclose the "inventory database" as recited, in part, in Claim 1.

Moreover, Gignac is limited to monitoring the "status of a customer's order as it moves from the supplier to the distributor to the VAR..." (Gignac, page 1). In order for a product to move from the supplier to the database, the product must already be manufactured. Therefore, the supply--chain monitoring of Gignac is limited to distribution after a product is already manufactured. In this regard, the "variety of distribution chain nodes" of Gignac fail to teach, suggest, or disclose "an inventory database that stores product availability data for products that are on the order bank" and "being produced" as recited, in part, in Claim 1.

d.   Examination has not provided any motivation to combine Gignac with Joseph

Applicant respectfully asserts that the Examiner has not provided a proper motivation to combine Gignac with Joseph.   Throughout the prosecution of the present application the Examiner has maintained that "a motivation or suggestion is clearly given in previous office actions, on page 3 last paragraph, 'a person with ordinary skill in the art would have been motivated to make the modification to Joseph because teachings of Gignac provide an inventory database for storing product availability data from a variety distribution chain nodes would enable merchants to provide users with comprehensive product availability data.'" (Advisory Action, Continuation Sheet, dated August 1, 2003).   However, the Examiner has not provided a motivation but merely a good reason for combining references. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See M.P.E.P. § 2143.01. Thus, the mere fact that the teachings of one reference would improve the teachings of another reference, does not provide the required suggestion to combine or modify. Nothing in Joseph,

Gignac, or any other cited reference suggests or motivates the proposed combination or modification, nor has the Examiner provided evidence that suggests the proposed combination or modification. Speculation in hindsight that it would have been obvious to make the proposed combination because the proposed combination or modification would be helpful is insufficient under the M.P.E.P. and governing Federal Circuit case law. Furthermore, Applicant respectfully submits that because the proposed modification would render Joseph unsatisfactory for its intended purpose as discussed above, there is no suggestion or motivation to make the proposed modification. See M.P.E.P. § 2143.01. The M.P.E.P. and Federal case law require the Examiner to do more than simply recite a reason the Examiner believes one reference would improve another, and in a case where one reference would be rendered unsatisfactory for its intended purpose if a combination were made (e.g., the present ease), there simply is no suggestion or motivation to make the combination.

Please charge the fee of $330 as applicable under the provisions of 37 C.F.R. § 1.17(c) and any additional fee or credit any overpayment in connection with this filing to Ford Global Technologies, L.L.C. Deposit Account No. 06-1510. A duplicate of this notice is enclosed for this purpose.

Respectfully submitted,

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Enclosure - Appendix

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IX. <u>APPENDIX - CLAIMS ON APPEAL</u>

1.   An online system of locating a consumer product having specific configuration in an enterprise production pipeline and inventory, comprising:

a locate client process operable to:

receive product configuration data; and

generate a search request message incorporating the product configuration data in response to user input;

an inventory database that stores product availability data for products that are on the order bank, being produced, in-transit to distribution facilities, and products at the distribution facilities; and

a locate server process operable to:

receive the search request message from the locate client process;

search the product availability data in the inventory database for products matching and substantially matching the product configuration data;

generate a search reply message containing the matching products; and

return the search reply message to the locate client process.

2.   The system, as set forth in claim 1, wherein the search request message and search reply message are XML messages.

3.   The system, as set forth in claim 1, wherein the search reply message comprises:

a list of products and respective configuration data; and

a percentage value for each product in the list indicative of the degree of matching between the product and the product configuration data contained in the search request message.

4.   (Canceled)

5.   The system, as set forth in claim 1, wherein the search request message comprises a list of search criteria and a weighting of each criterion.

6.   The system, as set forth in claim 1, wherein the search reply message comprises a pointer to an image of each product,

7.   The system, as set forth in claim 1, wherein the locate server process comprises:

a listener operable to receive the search request message from the locate client process;

a parser operable to receive the search request message from the listener and extract message parameters; and

a searcher operable to search the product availability data in the inventory database according to the message parameters.

8.   The system, as set forth in claim 1, wherein the locate client process comprises:

a message converter operable to receive a search request document containing search criteria and convert to an XML document having a predetermined format; and

a message client process operable to receive the XML document and convert to an XML search request message.

9.   The system, as set forth in claim 8, further comprising a response parser operable to receive the search reply messages from the locate server process and generate record set objects therefrom.

10.   An online method of locating a consumer product having specific configuration in an enterprise production pipeline and inventory, comprising:

receiving a search request message having product configuration data submitted by a user;

formulating a search query with search criteria corresponding to the product configuration data;

searching product availability data associated with products that are on the order bank, in-production, in-transit, and in-inventory for a product matching the product configuration data;

generating a search reply message containing any product determined based on the search of the product availability data to substantially match the product configuration data; and

sending the search reply message to the user.

11.   The method, as set forth in claim 10, further comprising:

receiving the search request message on a predetermined port;

parsing the search request message to extract product configuration data; and

searching the product availability data using the extracted product configuration data.

12.   The method, as set forth in claim 10, wherein receiving the search request message comprises receiving an XML search request message.

13.   The method, as set forth in claim 10, wherein generating the search reply message comprises:

compiling a list of products and respective configuration data; and

providing a percentage value for each product in the list indicative of the degree of match between the product and the product configuration data contained in the search request message.

14.   The method, as set forth in claim 10, wherein receiving the search request message comprises receiving a list of search criteria and a weighting of each criterion.

15.   The method, as set forth in claim 10, further comprising:

receiving a search request document containing search criteria and converting to an XML document having a predetermined format; and

converting the XML document to an XML search request message.

16.   The method, as set forth in claim 10, further comprising:

displaying product configuration information to the user on a web page;

receiving product configuration selection from the user; and

displaying a search result list of product substantially matching the product configuration and percentage matching data on a web page.

17.   The method, as set forth in claim 10, further comprising: importing in-inventory product availability data from dealerships; and

importing in-process product availability data from an enterprise database.

18.   The method, as set forth in claim 10, wherein generating the search reply message comprises:

incorporating a unique identifier of each substantially matching product;

incorporating product configuration data of each substantially matching product; and

sorting the substantially matching products by descending degree of match between the product configuration data of the products and the product configuration data in the search request message.

19.   The method, as set forth in claim 10, further comprising:

receiving a tag request message submitted by the user, the tag request message containing a unique product identifier;

modifying the product availability data associated with the product identified by the unique product identifier in the inventory database; and

generating a tag reply message confirming the completion of tagging the identified product.

20.   The method, as set forth in claim 19, further comprising suppressing the tagged product from subsequent search requests.

21.   The method, as set forth in claim 16, further comprising displaying an image of the product in response to receiving a user selection input.

22.   The method, as set forth in claim 16, further comprising displaying detailed information associated with a product in response to receiving a user selection input.

23.   The method, as set forth in claim 16, further comprising:

receiving a user selection input of a product in the list;

generating a search request message having an unique product identifier associated with the selected product;

searching the product availability data for detailed data associated with the unique product identifier;

generating a search reply message having the detailed data.

24.   An online method of locating automotive vehicles having specific configuration in an enterprise production pipeline and inventory for purchase, comprising:

receiving a search request message having vehicle configuration data submitted by a user;

formulating a search query with search criteria corresponding to the vehicle configuration data;

searching vehicle availability data associated with vehicles that are on the order bank, in-production, in-transit, and in-inventory at the dealerships for a vehicle matching the vehicle configuration data;

generating a search reply message containing any vehicle determined based on the search of the product availability data to substantially match the vehicle configuration data, the search reply message including a vehicle identifier and vehicle configuration data of each substantially matching vehicle; and

sending the search reply message to the user.

25.   The method, as set forth in claim 24, further comprising:

receiving the search request message on a predetermined port;

parsing the search request message to extract vehicle configuration data; and

searching the vehicle availability data using the extracted vehicle configuration data.

26.   The method, as set forth in claim 24, wherein receiving the search request message comprises receiving an XML search request message.

27.   The method, as set forth in claim 24, wherein generating the search reply message comprises:

compiling a list of vehicles and respective vehicle configuration data; and

providing a percentage value for each vehicle in the list indicative of the degree of match between the vehicle and the vehicle configuration data contained in the search request message.

28.   The method, as set forth in claim 24, wherein receiving the search request message comprises receiving a list of search criteria and a weighting of each criterion.

29.   The method, as set forth in claim 24, further comprising:

receiving a search request document containing search criteria and converting to an XML document having a predetermined format; and

converting the XML document to an XML search request message.

30.   The method, as set forth in claim 24, further comprising:

displaying vehicle configuration information to the user on a web page;

receiving vehicle configuration selection from the user; and

displaying a search result list of vehicles substantially matching the vehicle configuration and percentage matching data on a web page.

31.   The method, as set forth, in claim 24, further comprising:

importing in-inventory vehicle availability data from dealerships;

importing in-process vehicle availability data from an enterprise database; and

updating the vehicle availability data with the imported data.

32.   The method, as set forth in claim 24, wherein generating the search reply message comprises:

incorporating a unique vehicle identifier of each substantially matching vehicle;

incorporating vehicle configuration data of each substantially matching vehicle; and

sorting the substantially matching vehicles by descending degree of match between the vehicle and the vehicle configuration data in the search request message.

33.   The method, as set forth in claim 24, further comprising:

receiving a tag request message submitted by the user, the tag request message containing a unique vehicle identifier;

modifying the vehicle availability data associated with the vehicle identified by the unique vehicle identifier; and

generating a tag reply message confirming the completion of tagging the identified vehicle.

34.   The method, as set forth in claim 33, further comprising suppressing the tagged vehicle from subsequent search requests.

35.   The method, as set forth in claim 30, further comprising displaying a photographic image of the vehicle in response to receiving a user selection input.

36.   The method, as set forth in claim 30, further comprising displaying detailed information associated with a vehicle in response to receiving a user selection input.

37.   The method, as set forth in claim 30, further comprising:

receiving a user selection input of a vehicle in the list;

generating a search request message having an unique vehicle identifier associated with the selected vehicle;

searching the vehicle availability data for detailed data associated with the unique vehicle identifier;

generating a search reply message having the detailed data.

38.   An online method of purchasing a vehicle, comprising:

displaying vehicle configuration data;

receiving user online input on vehicle configuration, including make, model, and color of the vehicle;

receiving user online input to search for a vehicle having the vehicle configuration;

generating a search request message incorporating the user-entered vehicle configuration;

sending the search request message to a locate process, the locate process operable to search vehicle availability data for vehicles that are on the order bank, in-production, in-transit, and in-inventory at the dealerships for a vehicle matching the vehicle configuration data;

receiving a search reply message including a list of vehicles determined based on the search of the vehicle availability data to substantially match the user-entered vehicle configuration; and

displaying the list of vehicles.

39.   The method, as set forth in claim 38, further comprising:

receiving an online user input selecting a vehicle from the list of vehicles;

receiving an online user input requesting to tag the selected vehicle;

generating a tag request message incorporating a unique vehicle identifier of the selected vehicle; and

sending the tag request message to the locate process.

40.   The method, as set forth in claim 38, wherein displaying the list comprises displaying the vehicles in descending percentage of degree of match to the user-entered vehicle configuration.

41.   The method, as set forth in claim 38, further comprising:

receiving an online user input selecting a vehicle from the list of vehicles;

receiving an online user input requesting detailed data on the selected vehicle;

generating a search request message incorporating a unique vehicle identifier of the selected vehicle; and

sending the search request message to the locate process.

42.   The method, as set forth in claim 41, further comprising:

receiving a search reply message including detailed data on the selected vehicle; and displaying the detailed data.

43.   The method, as set forth in claim 41, further comprising:

receiving a search reply message including a pointer to an image of the selected vehicle; and

displaying the detailed data using the pointer.

44.   The method, as set forth in claim 41, further comprising:

receiving a search reply message including a uniform resource locator to a web page containing an image of the selected vehicle; and

displaying the web page specified by the uniform resource locator.